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ABSTRACT

A study was conducted to identify reading competency standards for students seeking admission to Pennsylvania teacher education programs. The study sought to determine if differences exist in: (1) reading levels, habits, and attitudes of the teacher candidate pool at large public universities, small public universities, and small private church-related colleges; (2) reading levels, habits, and attitudes of males and females; and (3) reading levels, habits, and attitudes of elementary and secondary school teacher education candidates. The Nelson Denny Reading Test Form E and the Brown Holtzman Survey of Study Habits and Attitudes (SSHA) were administered to 407 students in 5 institutions. In addition, the scores of students from another institution on the Nelson Denny Reading Test were used. Admission criteria varied by institution, though each required a 2.0 grade point average. All had developmental courses and a college-level tutoring program available if needed. Little difference was found in the reading scores of students at the different institutions, indicating that admission criteria were sufficiently demanding. This lack of difference held when the sample was analyzed by gender and certification level. Satisfactory findings from the SSHA were attributed to the fact that the students were upperclassmen, and students with poor study habits and attitudes were not likely to remain enrolled. (JD)

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Assessment of Preservice Teachers
in Six Pennsylvania Colleges
and Universities

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Assessment of Preservice Teachers In Six Pennsylvania Colleges and Universities

Introduction

Much concern is being expressed today by educators, policy makers, and the general public about the quality of public education. Discussions tend to focus on two key issues which greatly affect the instruction in American classrooms: the teacher work force and the conditions of the work place.

It is the purpose of this paper to present data from a descriptive study which related to the first issue, the teacher work force.

Background

Schlechty and Vance (1983) and Sykes (1983) agree that teacher education candidates have decreased in both number and in proportion of the college population. These researchers also agree that the current student pool is less prepared academically than students in the past. Sykes uses SAT, Graduate Record Examination, and National Teacher Examination scores to support this view. His figures show significant decreases in the scores of education majors on the Graduate Record Exam and the National Teacher Examination from 1970-1976. SAT scores reveal a similar pattern. From 1973-1981 education majors' verbal SAT scores dropped 27 points; math scores dropped 31 points.

It is hypothesized by Sykes that the academically strong students are not selecting a career in teaching for a variety of reasons:

1. The purchasing power of teachers' salaries has declined.
2. The quality of the school working environment has declined.
3. Teaching has lost occupational prestige.

4. Career mobility is now possible for women and minorities in occupations which were blocked in the past.
5. Fewer teaching positions are available because of a smaller school population.

These factors have combined to produce what economists define as "over-education," a declining return on the investment in education caused by a reduction in employment opportunities commensurate with the job aspirations of graduates.

Sykes further contends that awareness of this concern has stimulated policy regulation of teaching and teacher education at the state level. He reports that roughly three-fifths of the states now require testing for preservice teachers (Sykes, 1983).

Colorado is an example of a state which requires education majors to demonstrate proficiency in spelling, English language usage, mathematics, and speaking ability. Frazier (1983) states that critics ask for data which show that basic skill screening results in better teaching. Frazier counteracts this statement by challenging critics to prove that basic competency testing hurts classroom teachers.

The Secondary Education faculty at The Pennsylvania State University decided in 1979 to begin assessing teacher education candidates in reading, writing and speaking. Their ongoing research has demonstrated that most prospective teachers meet initial screening levels in these basic skills and that programs can demonstrate the competency of their graduates regularly, as part of the program (Dupuis, 1981; Fagan, 1981; Snyder, 1981a, 1981b; Fagan, Dupuis & Snyder, 1983; Dupuis & Fagan, 1983).

It was within this context that the Pennsylvania Department of Education began studying a redesign of its Professional Education and Certification regulations.

Included in the general standards section of the preparation program for professional educators is a statement which recommends screening candidates prior to acceptance into teacher education programs. "Each institution must employ selective admission criteria to teacher certification programs including assessment and verification of an appropriate level of communication and mathematical skill along with a broad base of academic literacy" (Pennsylvania Department of Education, 1982).

This document generated much discussion among educators. If standards are to be set and students tested, shouldn't the scores represent a critical level which compares a student to his/her counterparts at other institutions? How do education majors enrolled in Pennsylvania institutions compare?

It was decided that a study should be conducted to identify reading competency standards for students applying for admission to teacher education programs.

The purpose of this study was threefold:

1. To determine if the differences exist in the reading levels, habits and attitudes of the teacher candidate pool at large public universities, small public universities and small private church-related colleges.
2. To determine if differences exist in the reading levels, habits and attitudes of male and female teacher education candidates.
3. To determine if differences exist in the reading levels, habits and attitudes of elementary and secondary teacher education candidates.

Subjects and Method

Five colleges and universities agreed to test education majors with the Nelson Denny Reading Test Form E (ND) and the Brown Holtzman Survey of Study Habits and Attitudes (SSHA) in the fall 1983 semester. The Pennsylvania State University, The University of Pittsburgh, Millersville University, St. Francis College, and Marywood College tested education majors who were completing the general education requirements and were enrolled in professional education courses. Indiana University of Pennsylvania had administered the Nelson Denny test at the completion of the spring 1983 semester, so those scores were collected and included in the study. Since the Indiana students were student teaching when the other tests were administered, it was not possible to test them with the SSHA. Four hundred and eighteen students were included in the population tested with the ND; three hundred and eighty-nine students were tested with the SSHA.

The majority of students tested were Pennsylvania residents. St. Francis and Marywood Colleges reported 10% of the population with a New York residency. Minority enrollment was less than 5%. All colleges and universities had admission standards for freshmen, but admission criteria varied by institution. Each of the schools required students to have earned a 2.0 grade point average before being accepted into the teacher education program. Marywood College interviewed candidates before acceptance. All schools had developmental courses and a college-wide tutoring program which was available to students referred by professors. The University of Pittsburgh tested education majors with a criterion referenced test in the first methods course. Students falling below minimum scores were required to make up this deficiency in a lab. The Pennsylvania State University provided other basic skills assessments, beyond the ND, for secondary education students.

Findings

Testing was concluded in data processed in November 1983. The preliminary findings are included in Tables I-VI. The ND is reported for the Vocabulary and Comprehension subtests, as well as the Total score. All ND scores are standard scores, converted from raw scores as recommended by the Test Manual. The range of standard scores for each test is Vocabulary, 269-339; Comprehension, 267-338; Total, 268-340.

Analysis of variance on the mean standard scores for the total sample on the Nelson Denny Reading Test indicated that there was no significant difference ($p < .05$) in the reading ability of students in large universities, small universities and small church-related colleges.

[Insert Table I about here]

Table II reports scores by sex, across all institutions. Again, no significant differences were found in the mean standard scores, on the subtests or the Total score. The number of males in the sample is limited because the predominant major in the sample is elementary education.

[Insert Table II about here]

The same conclusion can be stated for the analysis of scores by majors reported in Table III. Again, no significant differences between elementary and secondary majors were found, on the subtests or the Total score.

[Insert Table III about here]

TABLE I

MEAN STANDARD SCORES ON THE
NELSON-DENNY READING TEST BY INSTITUTION

INSTITUTION	# STUDENTS	VOCABULARY		COMPREHENSION		TOTAL	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
Indiana University of Pennsylvania	156	310	9.06	310	11.21	311	9.27
Marywood College	34	312	12.74	310	11.36	312	12.93
Millersville University	93	311	11.69	311	12.23	313	11.26
The Pennsylvania State University	80	311	11.71	313	12.85	313	11.90
University of Pittsburgh	38	318	11.53	315	14.13	313	32.57
St. Francis College	17	304	14.15	306	11.52	306	12.86
Total	418	311	11.19	311	12.16	312	14.25

TABLE II

COMPARISON OF MEAN STANDARD NELSON-DENNY READING
TEST SCORES BY SEX

Sex	N	Vocabulary			Comprehension			Total		
		$\bar{x}$	SD	T Value	$\bar{x}$	SD	T Value	$\bar{x}$	SD	T Value
Males	60	311	12.05	0.00	310	13.13	.552	309	25.68	.890
Females	358	311	11.06		311	11.99		312	11.26	

* Sign $p < .01$

** Sign $p < .10$

TABLE III

COMPARISON OF MEAN NELSON-DENNY STANDARD
SCORES BY CURRICULUM

Curriculum	N	Vocabulary			Comprehension			Total		
		$\bar{x}$	SD	T Value	$\bar{x}$	SD	T Value	$\bar{x}$	SD	T Value
Elementary	366	311	11.0	0.00	311	12.67	.559	311	14.67	.622
Secondary	52	311	12.87		310	12.07		314	10.65	

* Sign $p < .01$

** Sign $p < .10$

Tables IV-VI report data from the SSHA. The SSHA is comprised of four subtests, which are aggregated to form subscores and a total score. A, Delay Avoidance and B, Work Methods are summed to form I, Study Habits. C, Teacher Approval and D, Educational Acceptance are summed to form II, Study Attitudes. I and II are summed to form the total score, Study Orientation. Table IV reports the means and standard deviations of all seven scores by institution. The Pennsylvania State University students scored highest on all SSHA sections except Teacher Approval. On that section, Marywood College students ranked highest.

[Insert Table IV about here]

When SSHA scores are analyzed by sex, females scored higher than males on all sections (t tests significant at .01). Table V gives a complete listing of means and standard deviations. For the total score, Study Orientation, the difference is striking.

[Insert Table V about here]

The SSHA scores by certification areas, elementary vs. secondary majors, provide some evidence that elementary majors' study processes are more effective, given the definitions used in the SSHA. All sections showed significantly higher scores for elementary majors, though the delay avoidance difference was significant only at the .10 level. Again, the difference in the Total score, Study Orientation, is striking.

[Insert Table VI about here]

TABLE IV

MEAN SCORES OF EDUCATION MAJORS ON THE
SURVEY OF STUDY HABITS AND ATTITUDES BY INSTITUTION

SSHA Subsections	Institution	$\bar{x}$	SD
A Delay Avoidance	Millersville	28.2	9.9
	Marywood	31.3	10.3
	PSU	32.2	9.7
	Pitt	30.9	8.8
	St. Francis	27.4	9.0
B Work Methods	Millersville	33.0	10.1
	Marywood	36.8	9.4
	PSU	37.1	8.9
	Pitt	36.1	9.1
	St. Francis	34.4	9.3
I Study Habits	Millersville	61.1	18.7
	Marywood	68.0	18.4
	PSU	69.2	16.5
	Pitt	66.9	16.1
	St. Francis	61.8	16.5
C Teacher Approval	Millersville	35.5	9.7
	Marywood	40.5	8.2
	PSU	40.2	7.2
	Pitt	38.8	8.9
	St. Francis	39.0	9.6
D Educational Acceptance	Millersville	32.1	9.8
	Marywood	37.1	9.0
	PSU	37.5	7.8
	Pitt	36.8	7.2
	St. Francis	36.6	8.5
II Study Attitudes	Millersville	67.6	18.4
	Marywood	77.6	15.5
	PSU	77.8	13.9
	Pitt	75.6	15.4
	St. Francis	75.6	16.6
Total Study Orientation	Millersville	128.7	34.9
	Marywood	145.6	30.1
	PSU	147.0	27.5
	Pitt	142.6	26.6
	St. Francis	137.4	29.2

TABLE V

SCORES OF MALE AND FEMALE EDUCATION MAJORS
ON THE SURVEY OF STUDY HABITS AND ATTITUDES

Subsections	Sex	$\bar{x}$	SD	T ratio
Delay Avoidance	males	26.0	9.4	5.36*
	females	31.9	9.6	
Work Methods	males	30.7	10.2	5.56*
	females	37.1	8.8	
Study Habits	males	56.6	17.8	6.03*
	females	68.9	16.6	
Teacher Approval	males	35.0	9.6	4.35*
	females	39.7	8.1	
Educational Acceptance	males	31.0	8.9	6.07*
	females	37.2	8.3	
Study Attitudes	males	66.0	17.6	5.51*
	females	76.9	15.1	
Study Orientation	males	122.7	32.3	6.36*
	females	145.9	28.5	

N: males = 99
females = 290

* significant at $p < .01$

TABLE VI
SURVEY OF STUDY HABITS AND ATTITUDES SCORES BY
MAJOR, ELEMENTARY AND SECONDARY

Subsections	Major	$\bar{x}$	SD	T ratio
Delay Avoidance	Elementary Education	30.9	9.6	1.82*
	Secondary Education	28.9	10.3	
Work Methods	Elementary Education	36.6	8.9	3.36
	Secondary Education	32.9	10.5	
Study Habits	Elementary Education	67.5	16.8	2.82
	Secondary Education	61.8	19.1	
Teacher Approval	Elementary Education	39.6	8.3	3.57
	Secondary Education	36.1	9.2	
Educational Acceptance	Elementary Education	36.9	8.2	4.20
	Secondary Education	32.7	9.5	
Study Attitudes	Elementary Education	76.5	15.4	4.17
	Secondary Education	68.7	17.7	
Study Orientation	Elementary Education	144.0	28.6	3.71
	Secondary Education	130.6	34.6	

N: Elementary Education = 266
Secondary Education = 120

All significant at $p < .01$
except * = $p < .10$

Discussion

The purpose of this study was to gather information which could be used to determine the characteristics of the teacher education pool in Pennsylvania teacher training institutions. Once the reading levels, habits, and attitudes were identified, standards could be set which would permit schools to identify weak students in time to counsel them or provide corrective instruction.

Nelson Denny Test Results. It is interesting to note that there is very little difference in the reading scores of students at the different institutions. This lack of difference holds also when the sample is analyzed by sex and certification level. This would appear to indicate that the freshman admission criteria were selective, the developmental courses were effective or the general education programs were sufficiently demanding that students who have earned a 2.0 grade point average also have acceptable reading levels, on the average.

Survey of Study Habits and Attitudes. The Pennsylvania State University students have recently experienced a change from the quarter system to a semester format. It can be theorized that their study habits and attitudes have been refined by being forced to perform in a shorter time frame. It must be remembered that the students tested in this study were upperclassmen, so students with poor habits and attitudes are not likely to remain enrolled. Males score lower on study habits and attitudes. A greater percentage of secondary education students were male, which may have accounted for the results in Table VI.

Conclusions

It would appear from the data presented on the reading levels, study habits and study attitudes that these Pennsylvania education majors are not as ill prepared for teaching as national reports would suggest. The reading scores were negatively skewed, with the greater numbers of scores falling in the higher

ranges of the tests. However, scores were distributed, so perhaps this study will help teacher educators to identify the small groups of students who need additional skill work before entering the classroom.

Perhaps an even more important feat has already been accomplished: a communication network has been formed. Teacher educators are sharing techniques, evaluation instruments, and data. All institutions have indicated an interest in working toward state proficiency norms for acceptance into teacher education programs.

Upgrading teacher education is a difficult undertaking, but one which can be realized through strategic planning and cooperation among teacher training programs.

References

- Butler, M. Staff development and stages of a teacher's career. Washington, D.C.: 1982. (ERIC Clearinghouse on Teacher Education Fact Sheet).
- Davey, J. Teaching competence and teacher education: The fundamental issues. Teachers College Record, 1983, 84, (3), 553-556.
- Dupuis, M. M. How well do prospective English secondary teachers read? The English Record, Spring 1981, 22(2), 16-17.
- Dupuis, M. M. & Fagan, E. R. Basic skills of prospective teachers: How well do they read/write/speak? The Journal of Classroom Interaction. Su 1983, 18(2), 20-27.
- Dupuis, M. M. & Snyder, S. L. Criterion-referenced test for the assessment of reading and writing skills of professional educators. University Park, PA: The Pennsylvania State University, 1980.
- Fagan, E. R. How well do prospective English secondary teachers write? The English Record, Spring 1981, 22(2), 14-16.
- Fagan, E. R., Dupuis, M. M., & Snyder, S. L. A study of prospective teachers' basic skills. High School Journal. December-January 1983, 66(2), 130-134.
- Frazier, C. M. Why Colorado is testing teachers? Educational Leadership, Oct. 1983, 41, 73.
- Mayher, L. You have the power to defend excellence in teaching. American School Board Journal, May 1983, 170 (5), 19-21.
- Moore, K. D. & Markham, J. S. A competency model for the evaluation of teacher education program graduates. Teacher Educator, Summer, 1983, 19, 21-31.
- Schlechty, P. C. & Vance, J. S. Institutional responses to the quality/quantity issue in teacher training. Phi Delta Kappan, Oct., 1983, 65, 94-101.
- Snyder, S. L. How well do prospective English secondary teachers speak? The English Record, Spring 1981, 22(2), 17-18.
- Snyder, S. L. An investigation to develop and validate a rating scale for the assessment of the speaking competence of preservice teachers. Unpublished doctoral dissertation. The Pennsylvania State University, 1981.
- Sykes, G. Contradictions, ironies and promises unfulfilled: A contemporary account of the status of teaching. Phi Delta Kappan, Oct., 1983, 65, 87-93.
- Sykes, G. Teacher preparation and the teacher workforce: Problems and prospects for the 80's. American Education, Mar., 1983, 19 (2), 23-29.